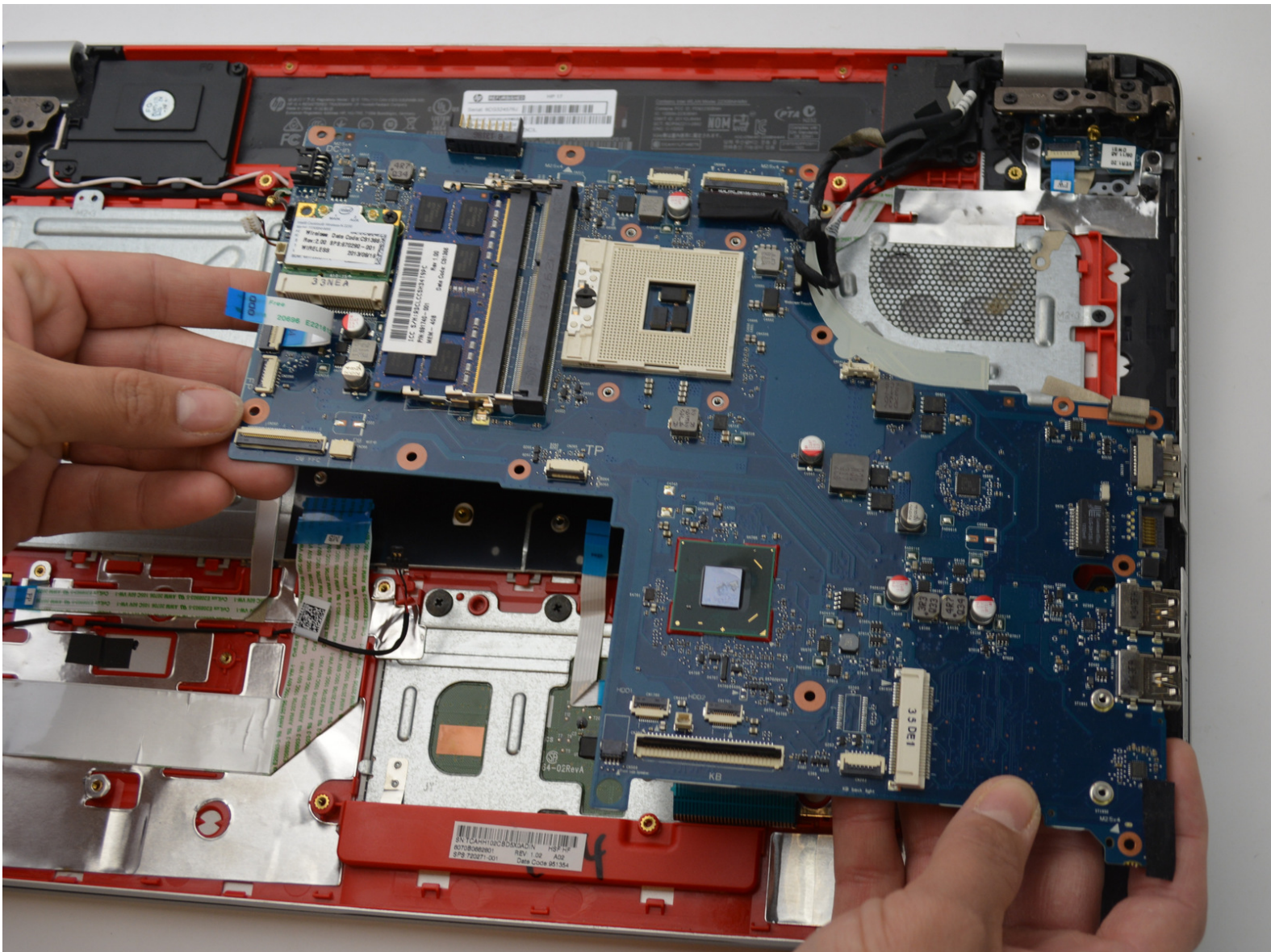




HP Envy 17-J013CL Motherboard Replacement

Switching out the motherboard in case of failure or other means of disassembly.

Written By: Matt McBride



INTRODUCTION

The motherboard is the guts of the computer where all the internal parts connect together to make the whole thing work. Without it there is no way for signals and information to pass along one another. There are a lot of pins, sockets, and ports so it is important to stay grounded and be gentle with it. Bending it can also break it!




TOOLS:

- [Phillips #1 Screwdriver](#) (1)
 - [Flathead 3/32" or 2.5 mm Screwdriver](#) (1)
-

Step 1 — Battery



- Lay the laptop with the battery facing towards you.

 Remember to disconnect the AC cable and other power sources from the device before replacing/repairing parts.

Step 2



- Grab hold of the small battery slider and apply pressure to the right.
- The laptop itself will push the battery out for you once the switch slides all the way to the right.

Step 3



- Pull the battery out and let go of the battery slider.

Step 4 — Back Panel



- Use a PH1-screwdriver to loosen the 7mm screw. The screw will not fully come out as it is held by a washer underneath but will come out enough to open it.

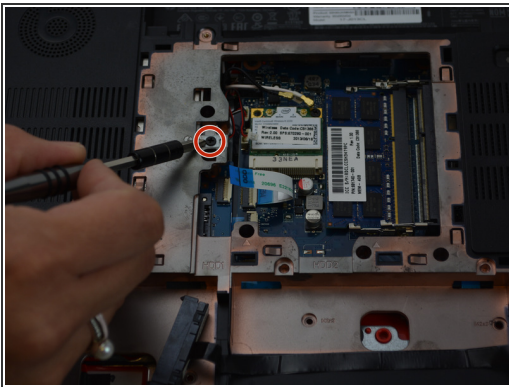
Step 5



- Gently pull the back panel off starting from the battery side towards the back.
- Pull it back as it snaps out of the holding sockets.

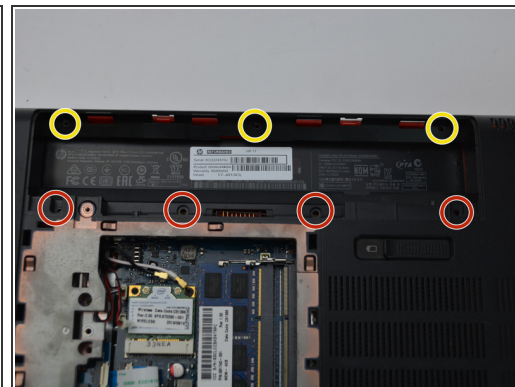
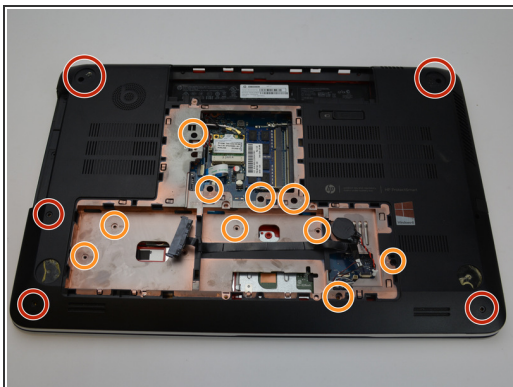
⚠ It is preferred to use both hands when pulling the back panel off to prevent bending it out of shape.

Step 6 — Processor



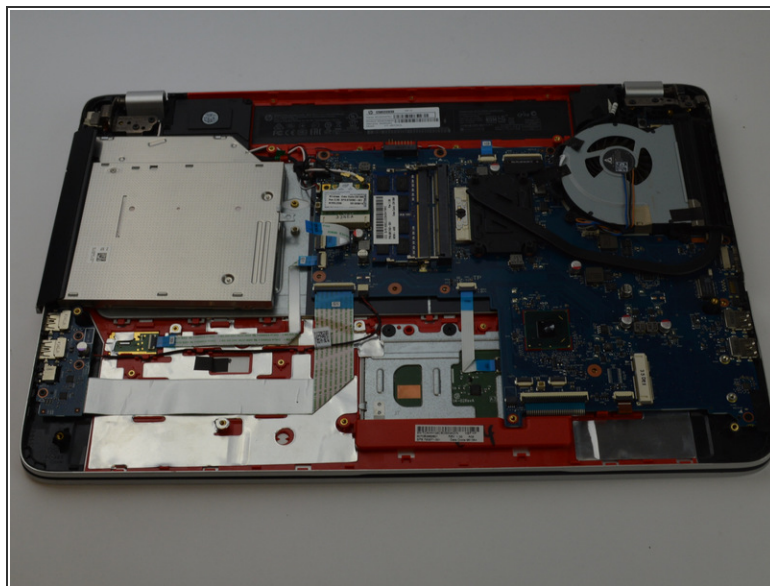
- Locate the 7mm screw for the optical drive right next to the WLAN and Memory modules.
- Remove the screw with a PH1-screwdriver to release the CD-drive.

Step 7



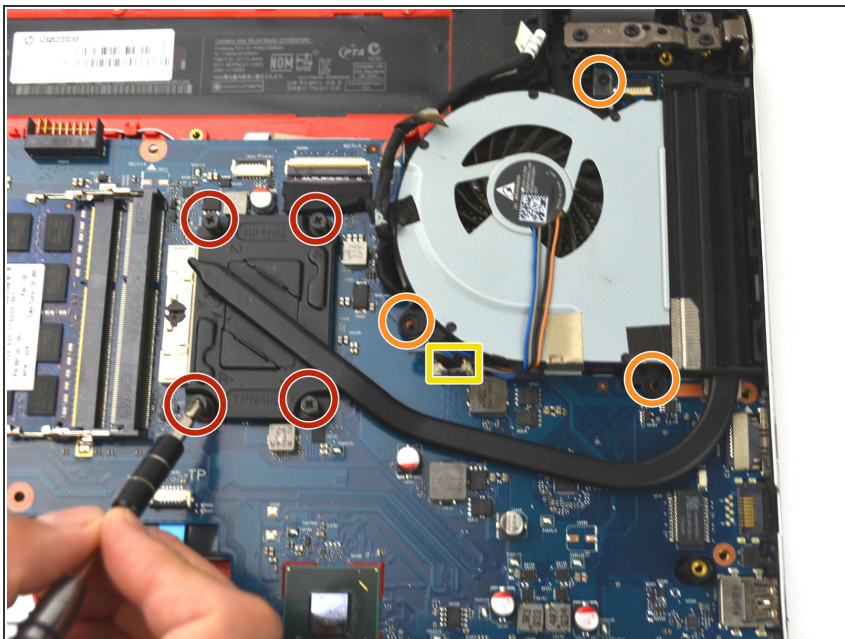
- Use a PH1-Screwdriver to remove all the 7mm screws.
- Use a PH0-Screwdriver to remove the 3mm screws.
- Use the same PH0-Screwdriver for the 2mm screws.

Step 8



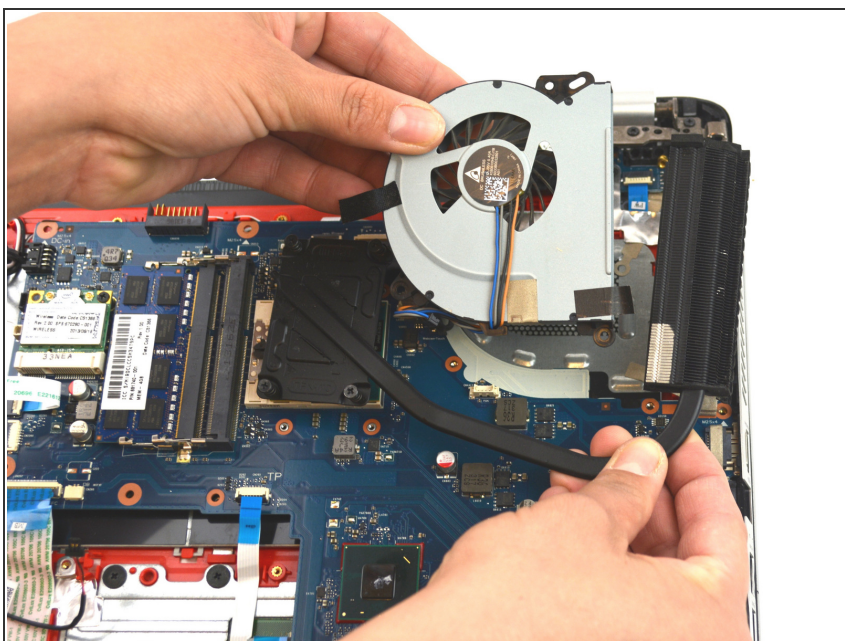
- Pull the under panel from the laptop by pulling at the edges once all screws are removed. Gently lift it off and place to the side.

Step 9



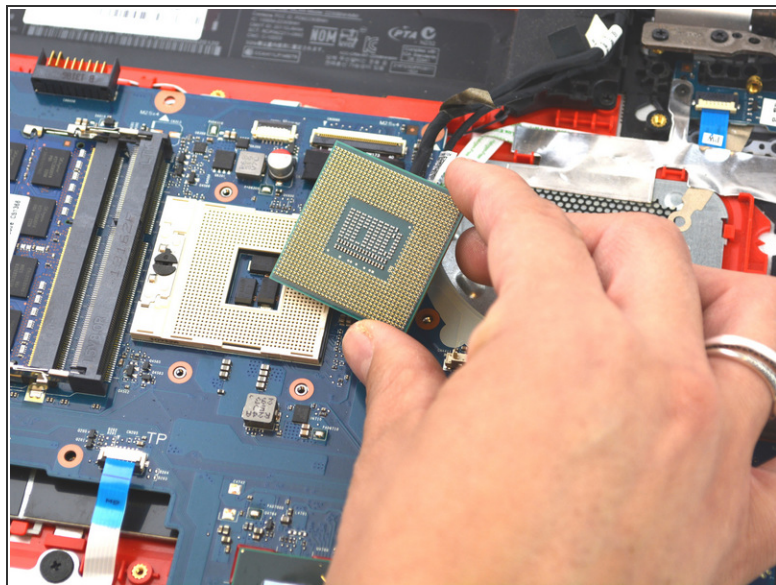
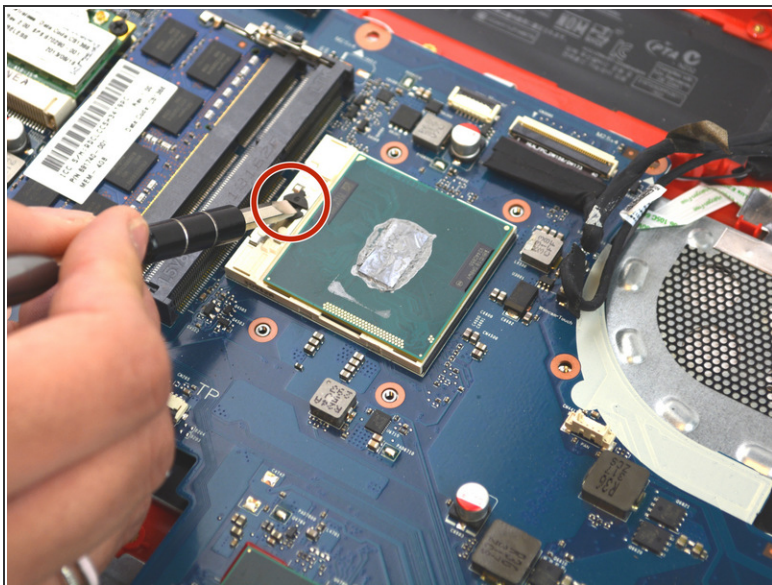
- Unscrew the coiled springs indicated in red from the the motherboard.
- Remove the 7mm screws with a PH1-screwdriver to loosen the fan.
- Unplug the fan from the motherboard.

Step 10



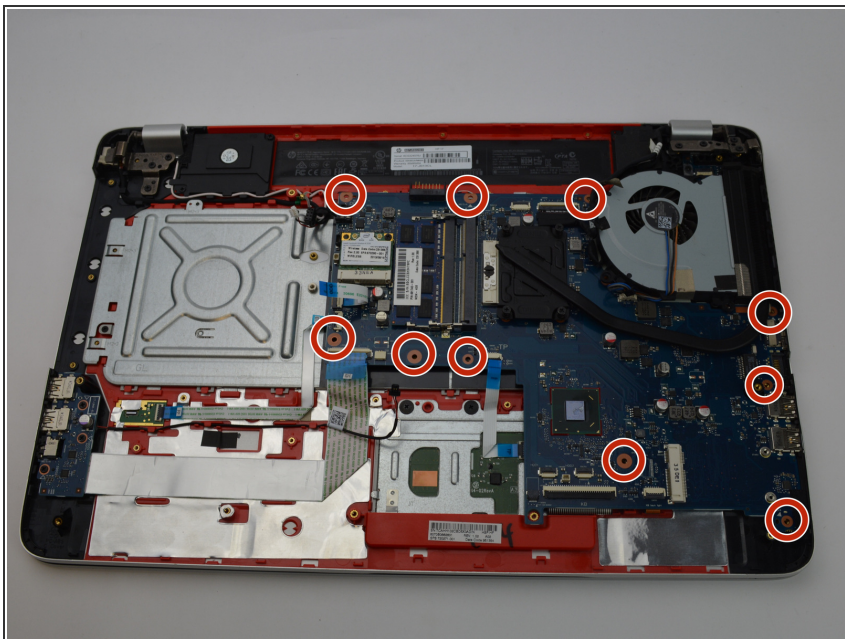
- Lift the fan out and then lift out the black grill covering the processor.

Step 11



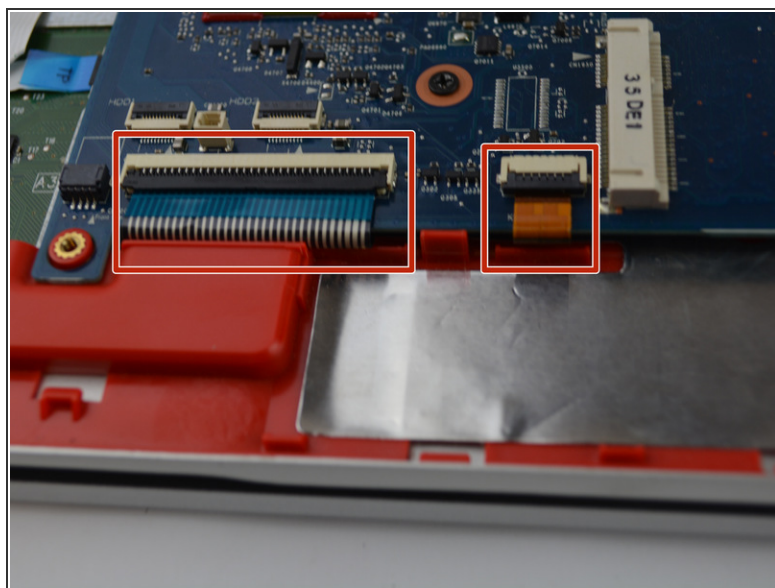
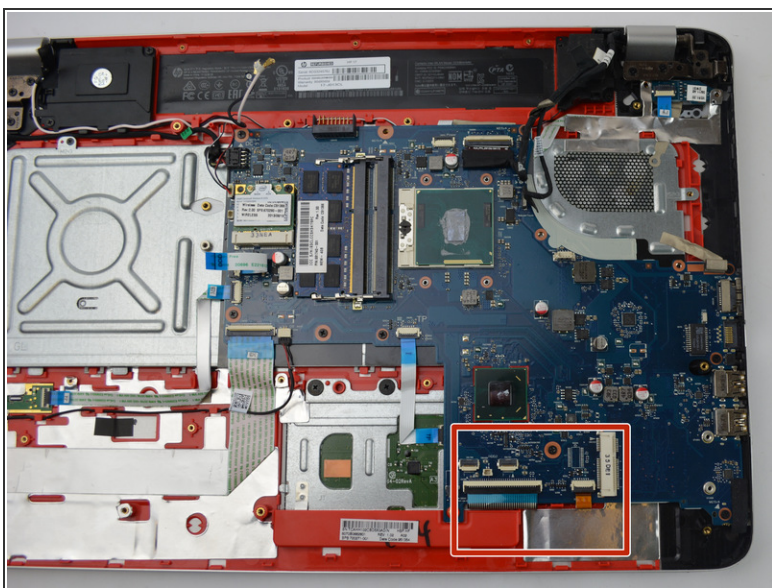
- Use a Flathead screwdriver to turn the screw 180 degrees to unlock the processor from the motherboard.
- Gently and vertically lift the processor out.
- ☞ When placing the processor chip back in, make sure the golden triangle is on the top-left corner of the motherboard slot.
- ⚠ Be careful not to bend the pins on the processor chip. Broken pins will render the chip useless.

Step 12 — Motherboard



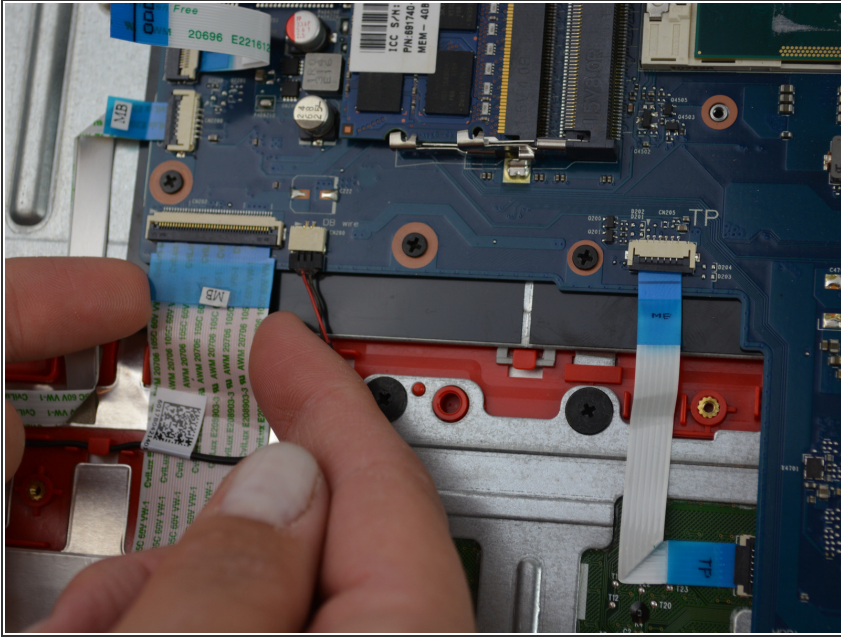
- Remove the 7mm screws holding down the motherboard to the frame.

Step 13



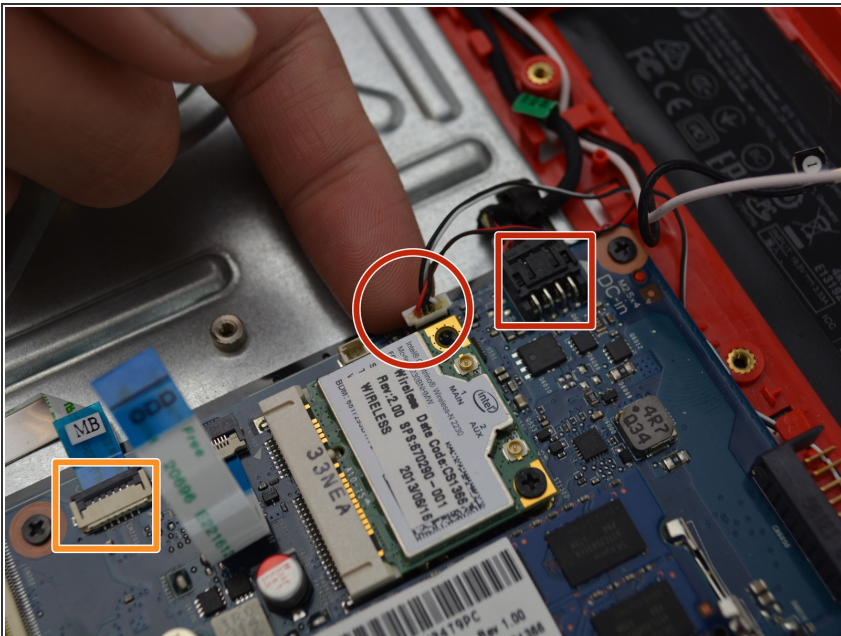
- Locate the two bottom cables and lift up the black secure tabs.
- Grab the cables by the translucent tabs and gently pull them out of the motherboard.

Step 14



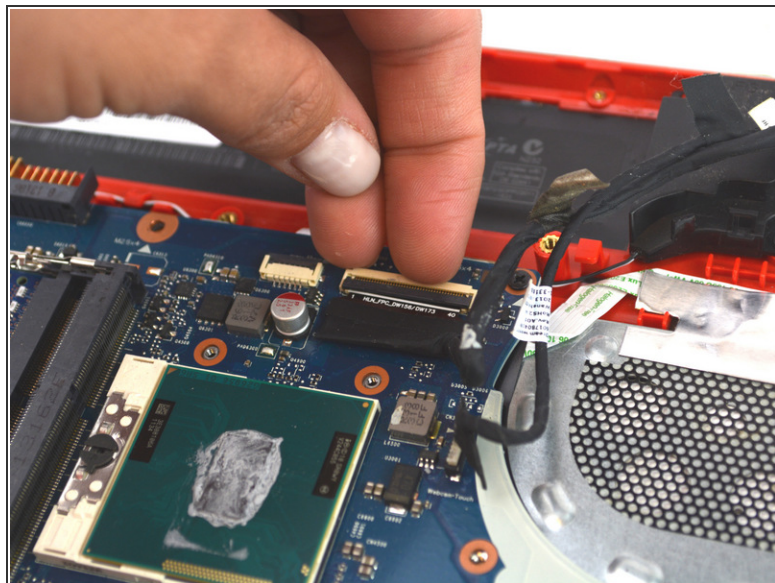
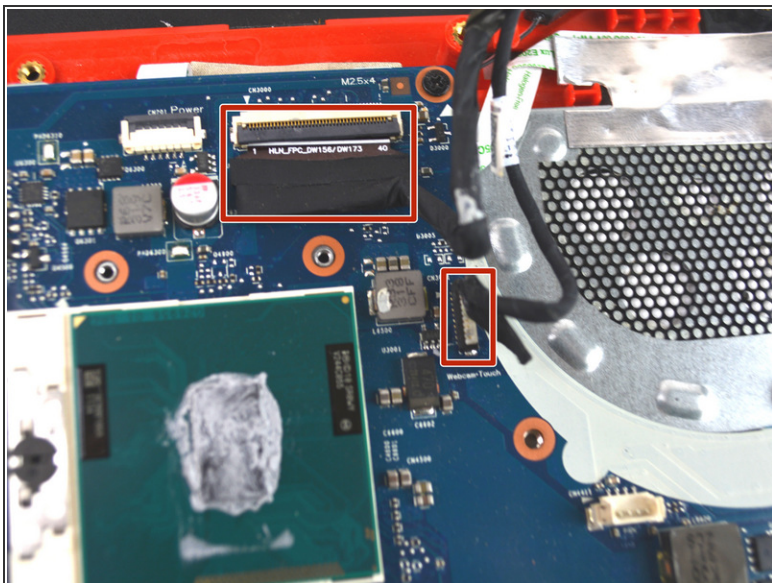
- On the left side of the motherboard, remove the two cables by first lifting the black secure tabs and using the translucent tabs to pull them out.

Step 15



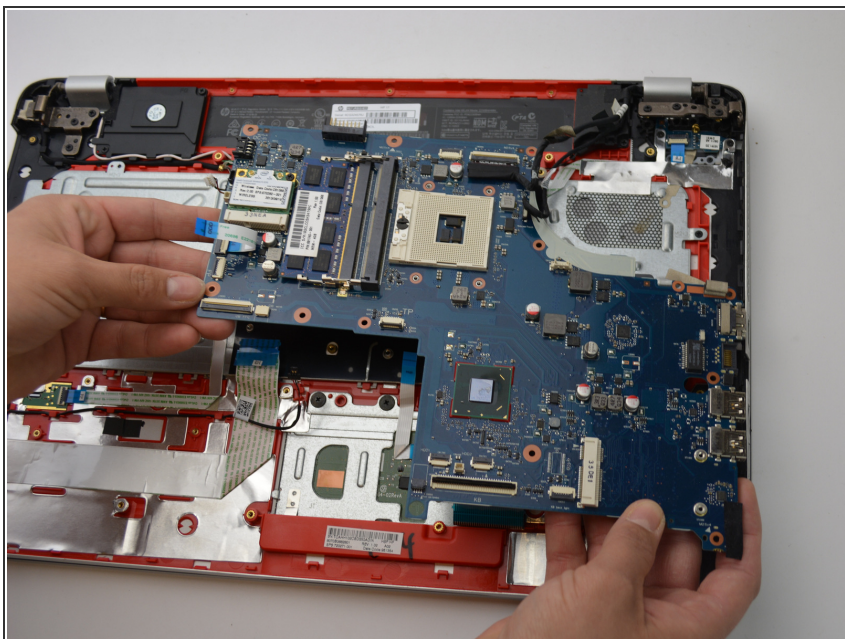
- Next to the WLAN, remove the two plugs indicated in red from the motherboard.
- ⚠ Be gentle when removing these two as too much stress can tear the cables from the plug.
- Remove the flat cable from the motherboard by first lifting the securing black tab and pulling it out.

Step 16



- Where the CPU fan was, lift the securing tabs on the cables and extract them from the motherboard.

Step 17



- Gently lift the motherboard from the laptop housing and pulling to the left.

To reassemble your device, follow these instructions in reverse order.

